



# **WINTERSET MUNICIPAL WATER UTILITY OPERATION MANUAL**

*Adopted October 25, 1979*

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## **PURPOSE**

These operation rules are intended to broadly govern operation of the Winterset Municipal Water Utility. Where a rule cannot be reasonably applied to a specific situation, the Board of Trustees reserves the right to act in an adjudicative capacity to resolve such conflicts.

## **GOALS**

The main purpose of the Winterset Water Department is to provide an adequate supply of clean, safe water to our customers for normal household, commercial and industrial use including fire protection.

## **OWNERSHIP**

*The Utility* will own and maintain all mains, hydrants, main-valves - treatment, storage and pumping facilities. New developments shall install all mains, hydrants, valves and other materials as part of the development. Upon completion the Water Utility will assume ownership.

*The Customer* will install all materials including, but not limited to the tapping saddle, corporation valve, curb-stop valve, curb stand and piping (both interior and exterior) needed to convey the water from the main to the consumer. Upon final inspections, the Water Utility will assume ownership of the service line from the main up to and including the curb stop.

## **CONNECTION TO SYSTEM**

Anyone within the city limits of Winterset has the right to connect to the Winterset Water Utility. However, should the property requesting water service be in an undeveloped area (i.e., lack of existing water mains or other city services) the customer may be required to install a meter pit and run their service from the nearest main.

Developers shall install all mains, hydrants, valves and other materials as part of any new development. The Utility may choose to participate in the cost of installing the water main to the edge of the new development if potential for additional water

revenue is sufficient to warrant such participation. At the development's completion the Water Utility and customers will assume ownership of these lines as defined previously.

The property owner or his agent (customer) must make a request for water service with the Water Utility at least 24 hours prior to having the connection made.

Water Utility personnel will make all connections to the mains, up to two inches. Taps over two inches will be made by an outside contractor (hired by the customer) under the direct supervision of Water Utility personnel.

The customer is responsible to hire a licensed plumber or contractor to install the water service from the main to the building. This contractor or plumber must have the main exposed, the tapping saddle and corporation valve installed prior to the arrival of Water Utility employees. If the water Utility employees are required to install these items an addition charge for labor will be included with the connection fee. Water Utility employees may refuse to enter any excavation that is not properly shored, benched or sloped.

## **SERVICE CONNECTION FEES**

Connection fees *inside the city limits* are as follows:

Single family dwelling	\$100
Multi-family up to 4 units	\$150
Multi-family 5 or more units	\$200
Commercial	\$250
Industrial	\$300
Development	\$500

Connection fees *outside the city limits* are as follows:

Single family dwelling	\$200
Multi-family up to 4 units	\$300
Multi-family 5 or more units	\$400
Commercial	\$500
Industrial	\$600
Development	\$1,000

These charges are connection fees only; all materials and labor

needed will be at the customer's or developer's expense.

## **MAINS AND SERVICE LINES**

**Approved materials for mains**, hydrants, valves, etc., shall meet all AWWA specifications and shall be installed in an approved manner.

**Approved materials for service lines** - The following materials are to be used in the installation of water service lines and are to be provided by the customer. Materials are not normally available from the Water Utility although some materials are kept in stock for emergency repairs. All materials supplied by the Water Utility will be billed accordingly.

### **Saddles**

- $\frac{3}{4}$  to 2 inch - Ford 202B Double Strap Brass Saddles or equal (to be approved by the Water Utility)
- Larger than 2 inch - Ford FTS tapping sleeve or equal (to be approved by the Water Utility)
- Saddles 2 inch and smaller will be installed at a 45 degree angle in the top  $\frac{1}{2}$  of the main.
- Tapping sleeves for larger than 2-inch services will be installed at a 90-degree angle and level with the main.

### **Corps**

- $\frac{3}{4}$  to 2 inch - Ford F1000 Series with AWWA/CC tapered thread inlet by pack joint outlet or equal (to be approved by the Water Utility)
- Larger than 2 inch - Appropriate size Clow gate or RW tapping valve or equal (to be approved by the Water Utility)

### **Pipe**

- Smaller than 2 inch - K-copper from main to curb stand on ductile or cast main. Polyethylene PEX pipe can be used from main to curb stand on pvc main. Polyethylene pipe must

be class 200 and of CTS sizing according to AWWA and/or SUDAS standard.

- 2 inch - Rigid, slip joint, SDR21 or equivalent 200 psi PVC from main to meter
- Larger than 2 inch - PVC ANSI/AWWA C900 (DR of 18 or less) or DIP ANSI/AWWA C151 with push on rubber gaskets, connections conforming to AWWA C111 (Class 50). If PVC is used as service to building the riser into the building shall be DIP with proper restraints & thrust blocking.
- *Under no circumstances will glued joint plastic pipe be allowed underground in the system.*
- *All plastic line shall have a trace wire buried with the pipe to aid in locating in the lines in the future.*
- *Any time lead service lines, goosenecks, etc. are uncovered they shall be replaced at the owner's expense.*
- *All service lines shall have a minimum of 48 inches of cover.*

#### **Curb Stop & Box**

- $\frac{3}{4}$  to 2 inch - Ford B44 pack joint by pack joint or equal (to be approved by the Water Utility) with a Ford Arch Base (saddleback) curb box with a HS type - 2-hole lid (Erie Pattern). A stationary rod, of the appropriate length, will be attached to the curb stop valve.
- The curb stop & box will be located at the property line or just inside the sidewalk and as close to the level of the finish grade as possible with no more than 3 inches of cover.
- Larger than 2 inch - the tapping valve will also serve as the service shutoff.
- Curb stops and service lines will not be installed in a driveway or sidewalk.

*The Water Utility will keep in stock a supply of materials for*

*emergency service line and main work. In the event that these materials are used at a job site the owner will be charged the price of the materials, plus a 15% mark up to cover transportation and inventory costs. Plumbers or other contractors may elect to replace the material used, instead of incurring a charge.*

## **SIZING OF MAINS & SERVICES**

The comprehensive water distribution plan will be used to size mains to provide adequate water flows and pressure in the area(s) it will serve.

Service line size will be as requested by the customer at the time of installation. Every effort will be made to help the customer size the service line to provide adequate flows and pressure. However, if requested line seems to be greatly over or under sized the customer must show reasonable need for such a line.

## **NUMBER OF SERVICE LINES**

Each building or customer must have their own separate service and meter with the following exceptions:

1. A single building with multiple users such as a duplex or an apartment building may have a single service and multiple or single meter(s).

2. A single service and meter may serve one non-residential building besides the main residence provided the same individual owns the building. A separate service and meter will be required at any time the same individual no longer owns the building.

3. A single service may serve multiple customers provided there is no other way to efficiently serve these customers. In this case a "master" meter will be installed at the main along with meters at each customer site. Should the master meter show water loss between the main and the customers, the customers will be responsible for payment for the amount of water lost.



## METERS & METER PITS

- Water meters of the appropriate size will be purchased from the Water Utility to be installed by a licensed plumber. If the water is turned on during construction, the water meter must be installed as soon as the water is available.
- Water meters will be installed as close to the entry point of the water service into the building as possible. It should have a shutoff valve both before and after the meter and a copper jumper cable connecting the pipe on both sides of the meter.
- As soon as any meter is installed the Water Utility will be contacted to install the outside remote and remote wire. As soon as the permanent meter is installed the Water Utility will be contacted to seal the meter.
- Any Person, business, or contractor found to have turned the water service on without the knowledge or permission of the water department shall pay a fine of \$50 and will be back billed for an estimated amount of water used.
- Any repeat of this offense will result in a fine of \$250 and the possibility of charges relating to theft of service filed.
- If a lengthy service is needed the Water Utility may require a meter and meter pit to be installed near the tap. The location and material needed for each meter pit will be determined on a case-by-case basis.

The customer will be charged a one-time fee for the original meter at the site All maintenance and repairs will be done at the expense of the utility with the exception of freezing or damage not related to normal use (see below).

**Frozen meters** will be billed to the customer. Charges for frozen meters will be a flat fee of current meter cost each time during the season.

**If a meter has been defaced, damaged or tampered** with the fee for repair shall be at current meter cost. *Water service may be terminated, or criminal charges filed, with board's approval, if problem seems to be theft of service related.*

**A separate meter may be installed for outside use only**, so that sewer charges are not incurred. All costs for these installations shall be the owner's responsibility. All such installations shall have an approved backflow preventer and will be inspected by department personnel. A minimum water bill will be received for this meter, year-round, even if usage is at 0.

**Meters for temporary use** are available. These meters can be attached to a fire hydrant to provide temporary water service as needed. Two sizes are available: 3/4 inch for flows up to 30 gpm and 3 inch for flows up to 350 gpm. Temporary meters are also available at City Hall. These meters are connected to an outside hose bib and metered use will be subtracted from permanent meter to calculate sewer bill.

## **METER TESTING**

All meters installed in the system will meet all AWWA standards for accuracy. This includes not only new meters but rebuilt meters also. If any meter does not meet these standards and cannot be restored to an accurate level, then that meter will be removed from service and junked.

Should a customer request it, the utility will perform an accuracy test on any meter. It will be requested for the customer to be present for such testing. Should the meter be found to be outside AWWA standards the meter will be replaced and there will be no charge for the test or new meter. If needed, an adjustment to the customer's bill will be made. If the meter is found to be accurate, it will be reinstalled and a fee of \$25.00 will be charged for the test. If the customer insists that the meter be replaced after the meter has been tested and found to be accurate, the customer will be charged the cost of the new meter.

## **BACKFLOW DEVICES**

In certain instances, the Water Superintendent or Building Inspector may require a backflow prevention device to be installed. These will be of the RPZ type and will be installed, inspected and tested (on an annual basis) by a licensed installer and inspector at the owner's expense.

## **LEAKS/REPAIRS**

Any service line leak or repair from the curbside to the house will be made at the owner's expense by a qualified plumber. Any service line leak from the main up to and including the curbside will be made at the Water Utilities expense. The Water Utility will be allowed to inspect any such repairs before covering with fill.

Any leak found in the system will be repaired as soon as possible to eliminate loss of water. Owners of service line leaks will be allowed to have reasonable time to make needed repairs. If after a reasonable time period repairs have not been made, the Water Utility retains the right to make any needed repairs with all costs to be billed to the owner.

In the event that ownership of a leak cannot be determined the Water Utility will incur the expense of excavation. If the leak is found to be on a service line, charges will be made to the owner for materials only.

Leaks after the meter are the responsibility of the customer and while the utility will try to inform the customer should their water bill increase significantly during any given billing period, the customer will still be responsible for payment of any water use that is registered by the meter. Should a customer request that an excessively high bill be adjusted, and the Water Utility staff determines that an adjustment is warranted; the General Manager is authorized to make the following adjustment:

First 2,000 cubic feet at regular rates  
Remainder at the cost of production

The water superintendent on an annual basis will determine the cost of production.

Any other adjustment must be requested in writing to the board.

## **WATER RATES** *(January 15, 2023)*

First 100 cubic feet @ \$14.77 (minimum charge).

Next 400 cubic feet @ \$9.22 per 100 cubic feet.

Next 500 cubic feet @ \$8.47 per 100 cubic feet.

Next 1000 cubic feet @ \$8.11 per 100 cubic feet.

Next 48,000 cubic feet @ \$8.11 per 100 cubic feet.

Over 50,000 cubic feet @ \$8.11 per 100 cubic feet.

Bulk Sales \$0.25 per 11 cubic feet.

## **SERVICE DISCONNECT AND RECONNECT**

Service may be discontinued for the following reasons:

1. Nonpayment of bill.
2. Resale or giving away of water.
3. Waste or misuse of water due to improper or imperfect service pipes and/or fixtures or failure to keep same in suitable state of repair.
4. At the customer's request.
5. For needed repairs.
6. Tampering with meter, meter seal, service, or valves, or permitting such tampering by others.
7. Connection, cross-connection, or permitting same, of any separate water supply to premises which receive water from the municipality.

Service will be reconnected once cause for disconnection has been corrected. Any disconnect or reconnect request needs to be made 24 hrs. in advance. Any disconnect or reconnect outside of normal business hours will be billed \$100.

## **DISRUPTION OF SERVICE**

The utility will make every effort to keep disruption of service

to a minimum and should such disruptions occur the Water Utility will make every effort to contact commercial and industrial customers that relies on water as an integral part of their business before water is shut off for repair or maintenance. However, the utility will not be responsible for any claims resulting in the disruption of service for any reason.

Notify as follows; schools, beauty/barber shops, major industrial/commercial users (IE Rose Acres, Parr Manufacturing, Eaton, Monument Works, ETC), nursing homes, hospitals, doctors' offices, dentist offices, veterinaries, restaurants.

If possible, an ad will be placed in the Shopper to notify the public of impending work.

Before any excavation is done in the system, all electric, water, gas, phone and cable TV lines will be located. If one of these services is in or extremely close to the excavation, the proper personnel will be contacted to be standing by for their help if needed.

Any repair work will be mapped and recorded before covering. Any new construction will be mapped and inspected by the Water Utility or it's representative before covering.

## **FROZEN SERVICE LINES**

It will be the customer's responsibility to thaw any such lines.

## **HYDRANTS**

Fire hydrants will be flushed and inspected once or twice yearly, spring and fall, and all needed maintenance performed to keep each hydrant in good working condition.

Any hydrant that is removed from service or otherwise unable to be used for fire protection, etc. will be clearly marked as out of service. The Fire Department will be advised that the hydrant is unusable and the estimated time for repairs. All departments will be notified when repairs are completed, and the hydrant is returned to service.

## **VALVES**

All valves will be operated once every 5 years to determine their condition.

## **LOCATES**

**General Locate:** For work other than water related excavation.

Locates will be made as accurately as equipment will allow.

If locate signals are not strong or nonexistent the excavator will be notified the water lines are in the area, but the utility is unable to make accurate locations. Personnel will be at the site during excavation to continue to help with locations.

If a strong signal is found and the utility operator is confident that the locate and depth is accurate, then the line(s) will be flagged or painted.

If the line(s) are damaged during excavation and the locate was accurate, to within 18 inches to either side of the paint or flag, the excavator will be responsible for all costs incurred for repairs.

If the line(s) are damaged during excavation and the locate was found to be inaccurate, the utility will be responsible for all costs incurred for repairs.

**Utility Water Locate:** For water related excavation on existing mains, main valves, hydrants, etc., or new mains, main valves, hydrants, etc., being installed by the Water Utility Department. All costs to be responsibility of the utility.

**Non-Utility Water Locate:** For water related excavations on service lines and service equipment.

Locates will be made as accurately as equipment will allow.

If locate signals are not strong or nonexistent the excavator will be notified the water lines are in the area, but the utility is unable to make accurate locations. Personnel will be at the site during excavation to continue to help with locations.

If a strong signal is found and the utility operator is confident that the locate and depth is accurate, then the line(s) will be flagged or painted.

If the line(s) are damaged during excavation and the locate was accurate, to within 18 inches to either side of the paint or flag, the excavator will be responsible for all costs incurred for repairs.

If the line(s) are damaged during excavation and the locate was found to be inaccurate, the utility will be responsible for all costs incurred for repairs.

**New Service Connection Locate:** For connection to existing mains for new service to house or business.

The main where the connection is to be made will be located as accurately as possible.

Should the main not be found in the original excavation, the contractor or owner will be responsible for any additional excavation, up to 5 feet in any direction from the original excavation.

If the utility was confident in the original locate and should the main not be found within this area from the original excavation, the utility will be responsible for any additional costs incurred to find the main.

*If the utility could not originally locate the main, an outside location service will be used to make the location prior to any digging. These costs will be the responsibility of the utility.*

*If the contractor or owner chooses to dig prior to location by an outside locator company, they will be responsible for all costs incurred.*

**New Development Locate:** For connection to existing main for purpose of new main and or equipment by an outside contractor, other than the Water Utility, for the purpose of development.

If the location of the connection is not a dead-end main, the locate will be made as accurately as possible.

Should the main not be found in the original excavation, the contractor or owner will be responsible for any additional excavation, up to 5 feet in any direction from the original excavation.

If the utility was confident in the original locate and should the main not be found within this area from the original excavation, the utility will be responsible for any additional costs incurred to find the main.

*If the utility could not originally locate the main, an outside location service will be used to make the location prior to any digging. These costs will be the responsibility of the utility.*

*If the contractor or owner chooses to dig prior to location by an outside locator company, they will be responsible for all costs incurred.*

If the location of the connection is a dead-end main, the locate will be made as accurately as possible.

Should the main not be found in the original excavation, the contractor or owner will be responsible for any additional excavation, up to 10 feet in any direction from the original excavation.

If the utility was confident in the original locate and should the main not be found within this area from the original excavation, the utility will be responsible for any additional costs incurred to find the main.

*If the utility could not originally locate the main, an outside location service will be used to make the location prior to any digging. These costs will be the responsibility of the utility.*

*If the contractor or owner chooses to dig prior to location by an outside locator company, they will be responsible for all costs incurred.*

## **COMPLAINTS**

If any complaint cannot be corrected to both the customer and the Superintendent's satisfaction, the customer has a right to bring the problem to the board of trustees for final



disposition.

## **TREATMENT**

Proper treatment techniques will be always followed to insure the delivery of a safe, clean water supply to the distribution system. All state and federal rules and regulations will be followed, and proper records will be maintained and filed with the appropriate agencies.

## **SAMPLING AND TESTING**

Bacteriological samples will be taken at various places in the distribution system each month. (See Bacteriological Sampling Program)

Other samples will be collected and tested by lab personnel at the water treatment plant or an outside certified lab. This sample collection will follow state and federal guidelines. (See IDNR or USEPA Operations Permit)

Samples other than routine will be performed as needed. If special testing is requested by the consumer and can be done in our lab there will be no charge, however if testing must be done at an outside lab the customer making the request shall pay any expenses incurred by the Water Utility.

If someone outside our service area requests testing, the testing will be charged at the following rates:

Turbidity	
(ntu).....	\$2.00
Free	Chlorine
(mg/l).....	\$2.00
Total	Chlorine
(mg/l).....	\$2.00
Temperature (f/c).....	
NC	
pH	(standard

units).....	\$2.00	
Iron		
(mg/l).....	\$2.00	
Fluoride		
(mg/l).....	\$2.00	
Manganese		
(mg/l).....	\$2.50	
Alkalinity		
(mg/l).....	\$3.00	
Total		Hardness
(mg/l).....	\$3.00	
Calcium		Hardness
(mg/l).....	\$3.00	
Color		(standard
units).....	\$3.00	
Nitrate		
(mg/l).....	\$3.50	
Total	Dissolved	Solids
(mg/l).....	\$3.00	
Conductivity		
(us/cm).....	\$3.00	
Dissolved		Oxygen
(mg/l).....	\$3.00	
Total		Coliform
(p/a).....	\$10.00	
Total		Coliform/Fecal
(p/a).....	\$10.00	
Lead.....		\$20.
00		
Copper.....		\$5.

## **RECORDS**

All records covering the operation and maintenance of the Water Utility will be kept at the Superintendent's office and will be available to the public upon request during regular business hours.

## **WATER SHORTAGES/EMERGENCIES**

In the event of a water shortage due to drought or emergency the Water Utility will follow the emergency action policy as set in the Water Usage Plan.

## **SAFETY**

All matters dealing with the safe operation of this department will be found in the Winterset Municipal Utilities Safety Manual and other safety programs.

## **PERSONNEL**

All matters dealing with the personnel of this department will be found in the City of Winterset Employee Policy Manual or the current Union contract.

## **EQUIPMENT FEES AND CHARGES**

Fees and charges for equipment and personnel will be quoted on a case-by-case basis.

These charges shall be kept at levels high enough that the utility will not be in competition with local plumbers and equipment operators.

Equipment is not to leave the city limits except in case of emergencies and only after authorization from the Water

Superintendent, General Manager or Board Member.